FORECAST 2030:SCENARIOS OF THE DAIRY MARKET

27. May 2019 St. Petersburg, Russia

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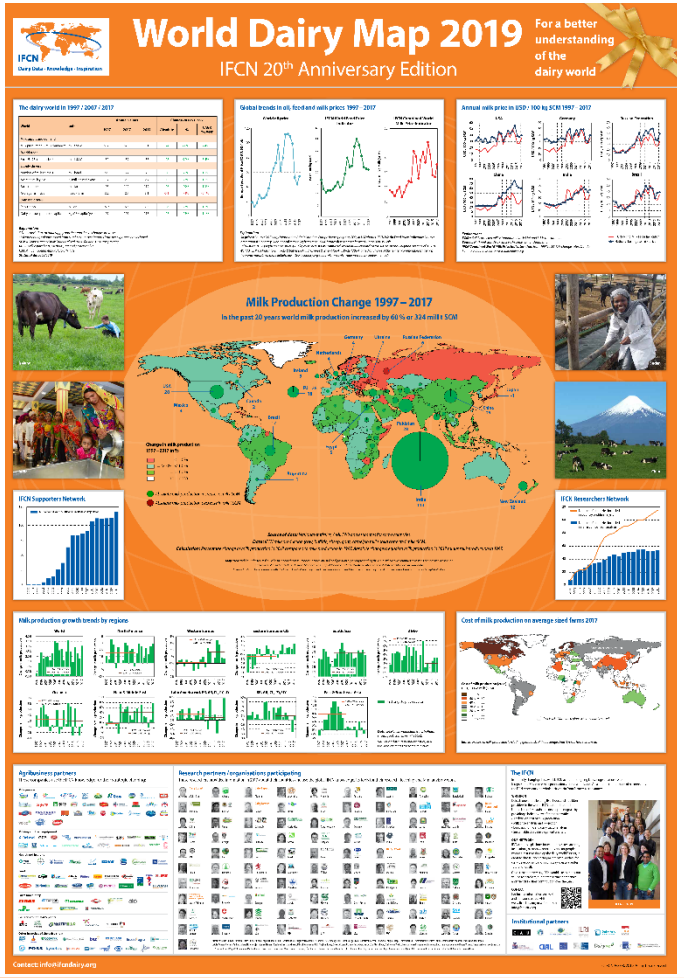
Agenda

1. The IFCN concept
2. The situation today
3. The last 20 years
4. The outlook to 2030
5. Summary



The IFCN Network

Mission

Create a better understanding of the dairy world by providing comparable data, knowledge and inspiration.

The IFCN Network Approach – 3 knowledge pillars

- Network of Researchers
- Network of Supporters (companies and organizations of the dairy industry)
- IFCN Research Center in Kiel (with >20 employees)

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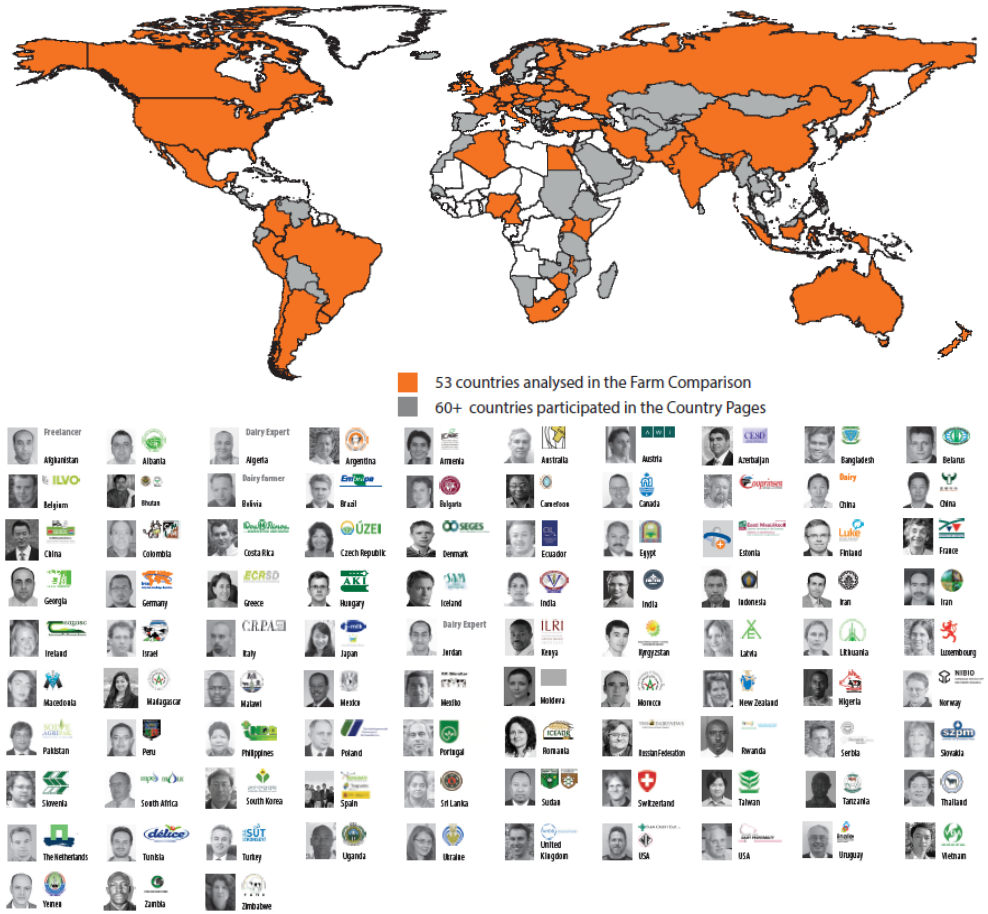
Status of the IFCN Network in 2019

Research partners in over 100 countries



Supporting partners (> 130)

Milk processing

Milking and barn equipment

Health and hygiene

Feed

Farm machinery

Genetics for animal & plants

Other branches of the dairy chain

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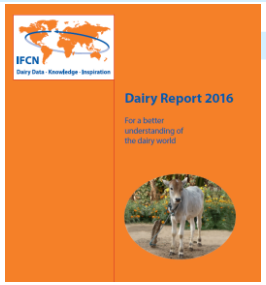
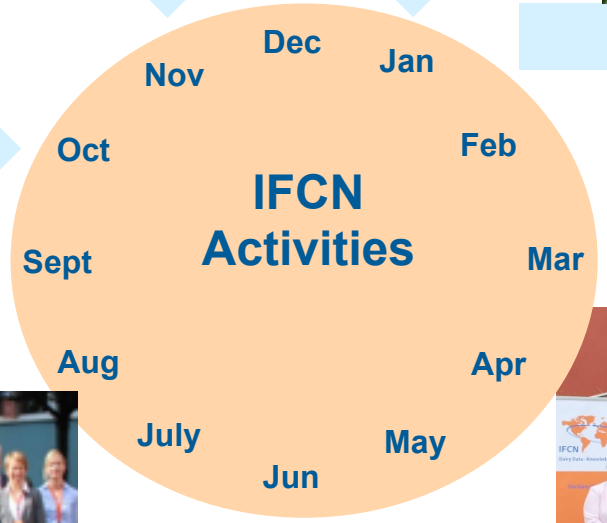
IFCN - An ongoing knowledge creation system

IFCN Regional Workshop - India



IFCN Supporter Conference

Kick off meeting



Data collection, validation & analysis

IFCN Dairy Conference

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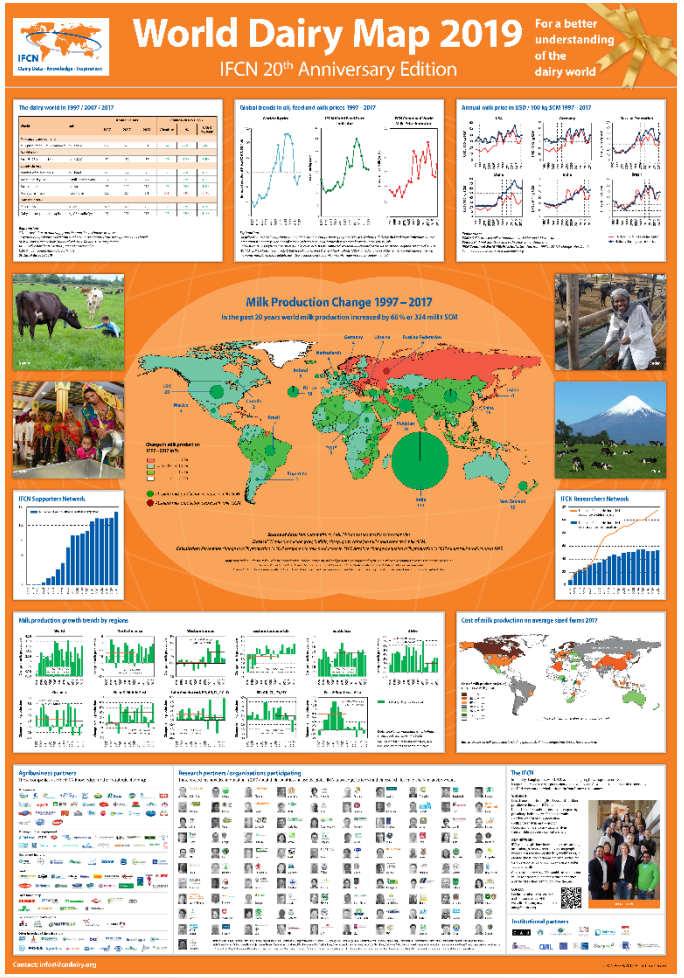
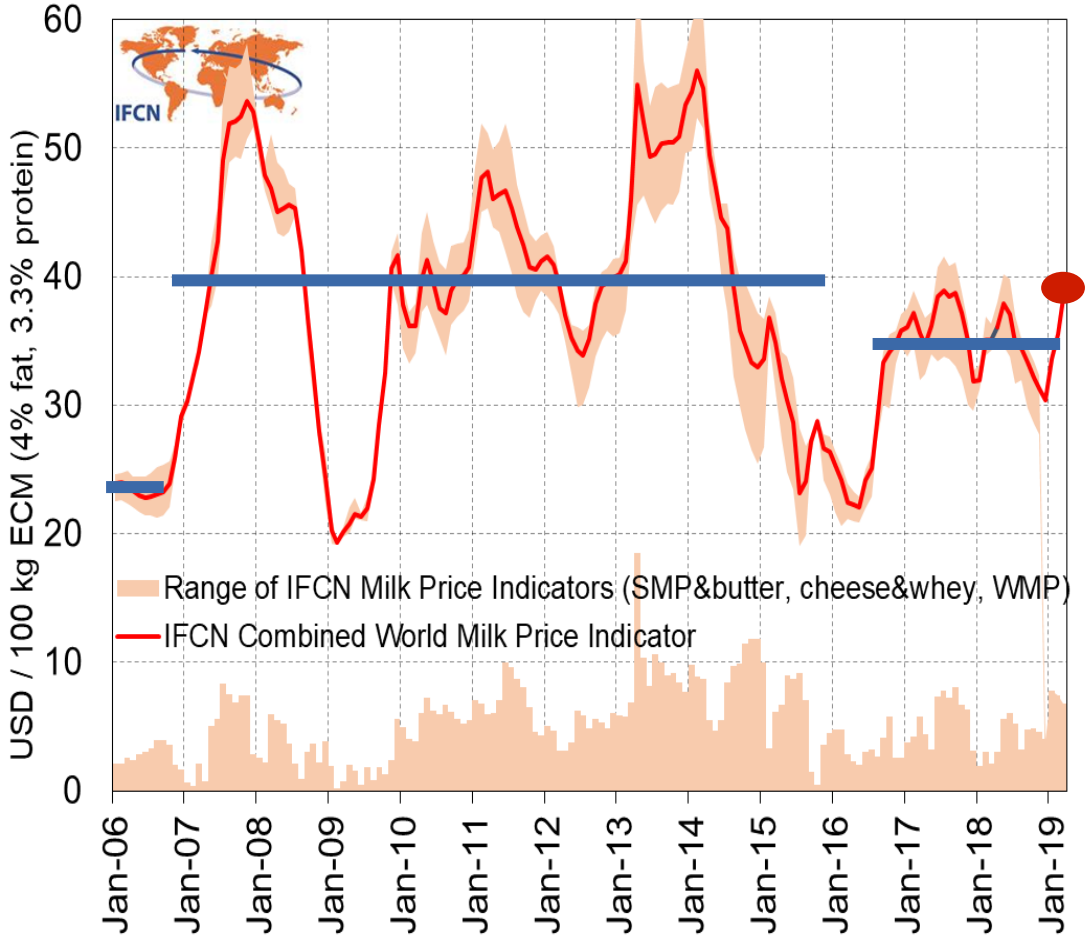


World Milk Price 2006 – 2019 + forecast 2020



Price levels (simplified)

2000 – 2006 – 25 $/ 100 kg

2007 – 2015 – 40 $/ 100 kg

Since 2017 – 35 $/ 100 kg

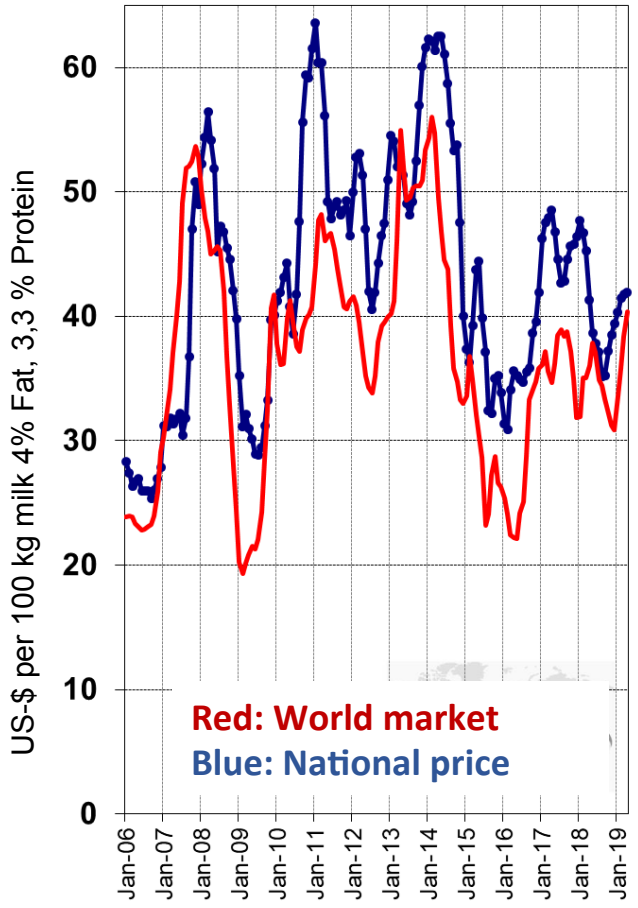
April 2019 – >40 $/ 100 kg

Key driver for price volatility :
Milk supply and its delay to respond to price signals

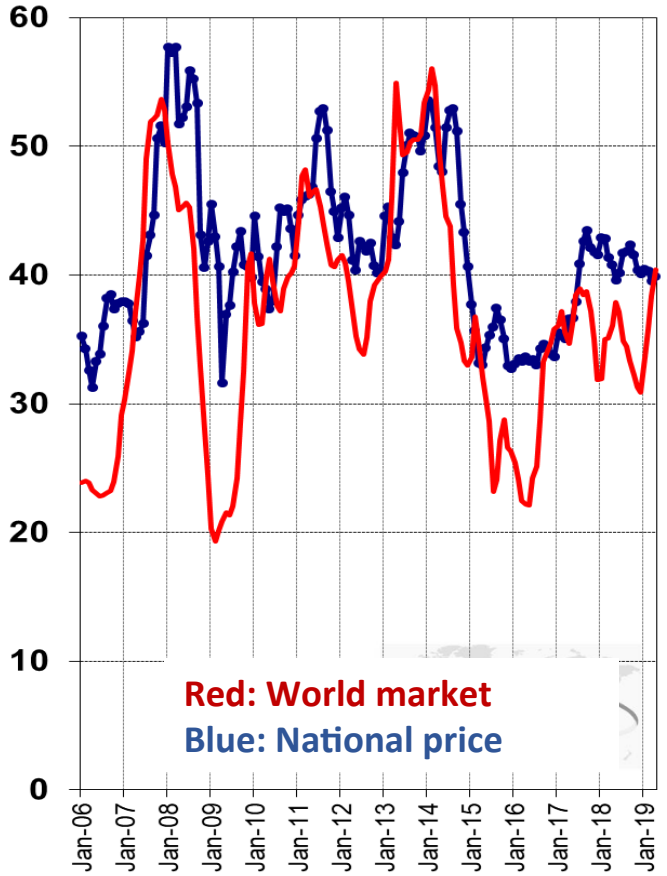
Source: D3.4 - IFCN Monthly Real Time Data and Farm Economics – 4/2019

Relation of World to National Milk Price

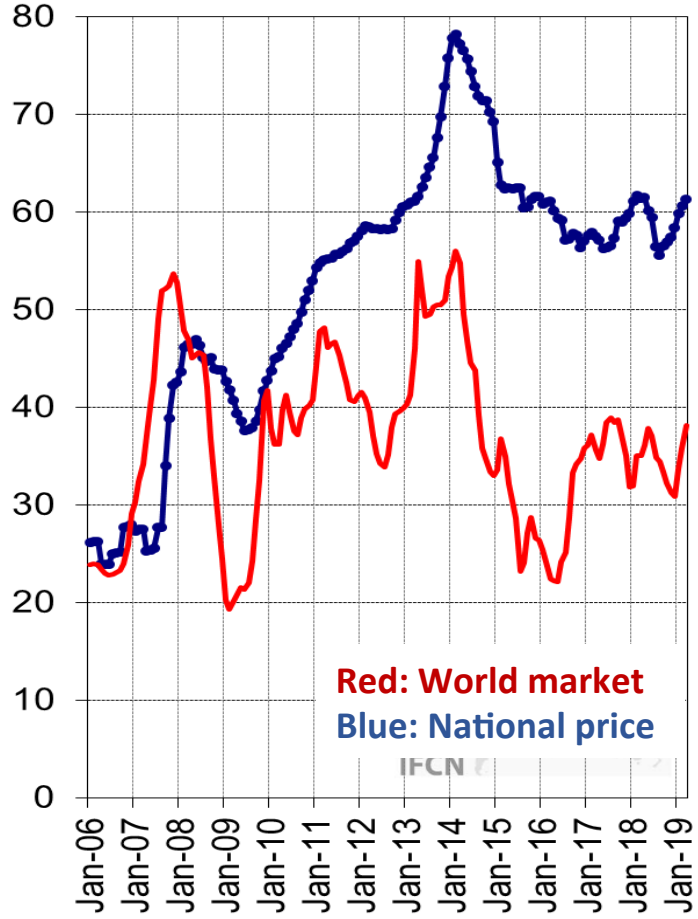
Russia



Germany



China



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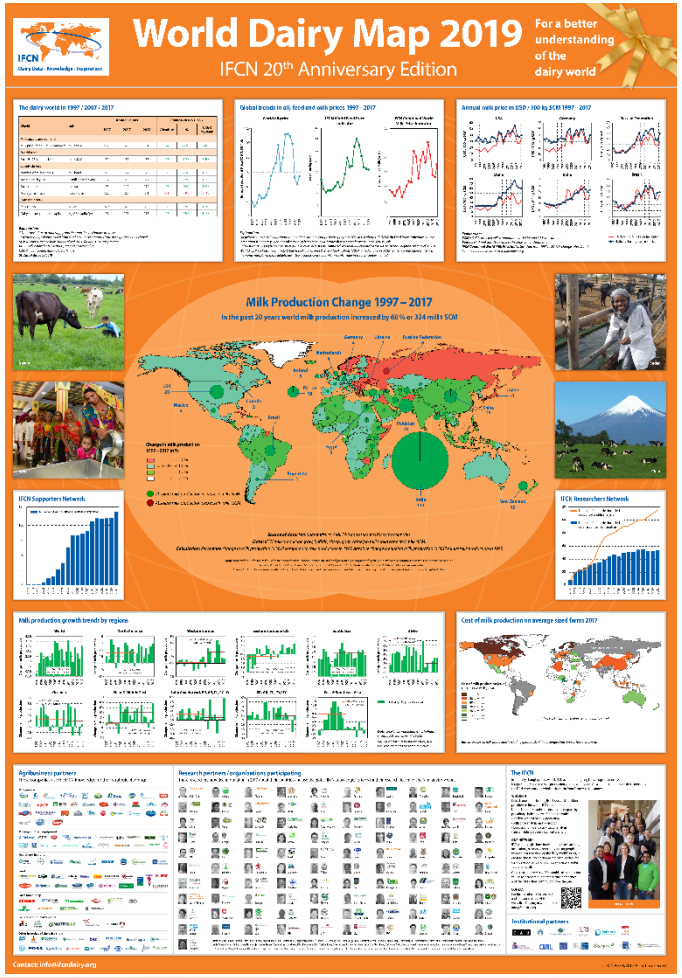
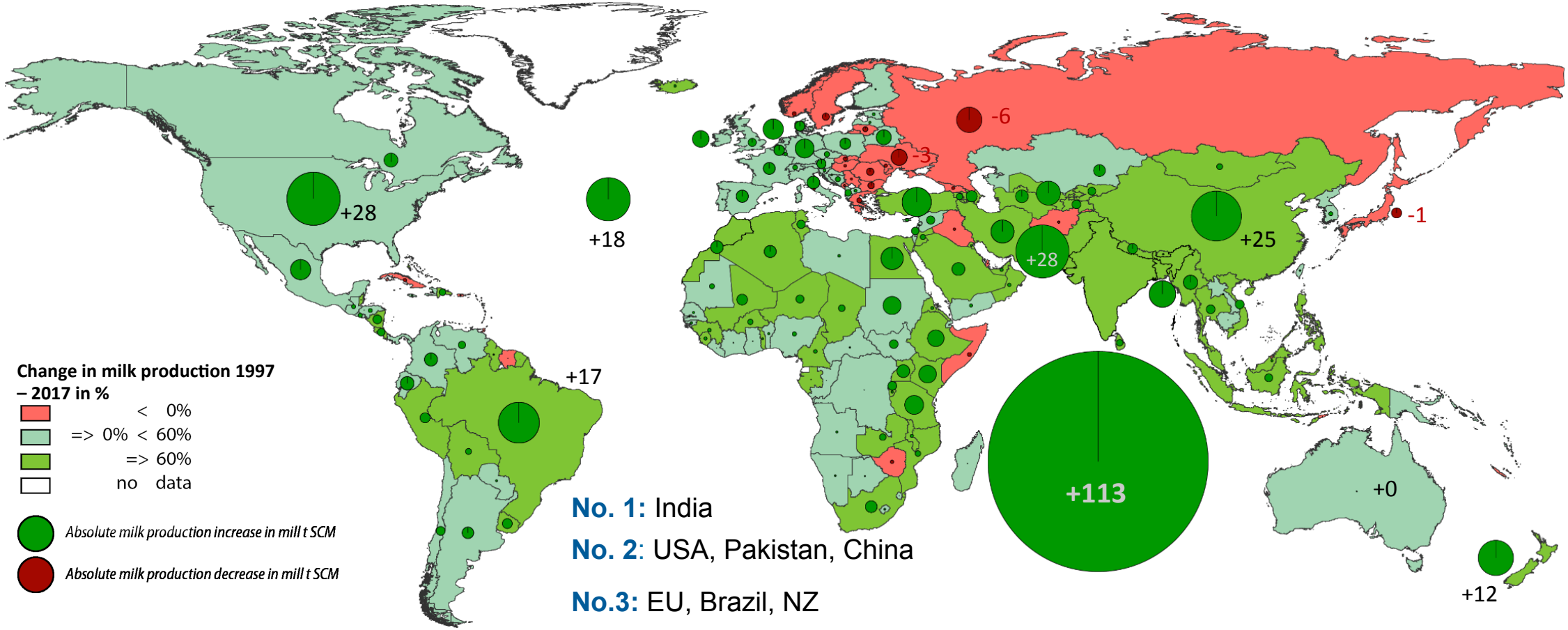


1997 – 2017: +60% Milk Production Growth

= 324 mill t milk all species, SCM corrected



No. 1: India

No. 2: USA, Pakistan, China

No.3: EU, Brazil, NZ

Decline: Russia, Ukraine, Japan, SE/NO

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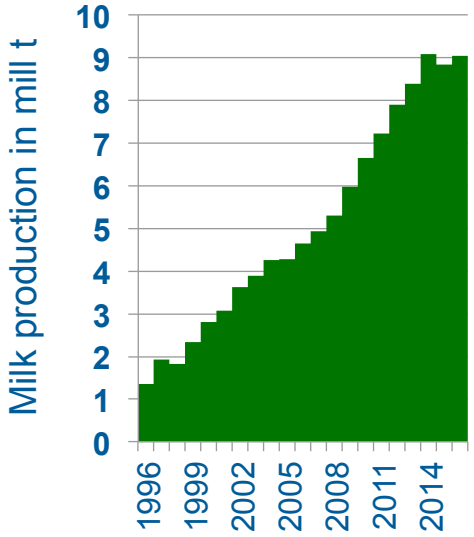
Patterns in dairy region development

Rockets

NZ South Island

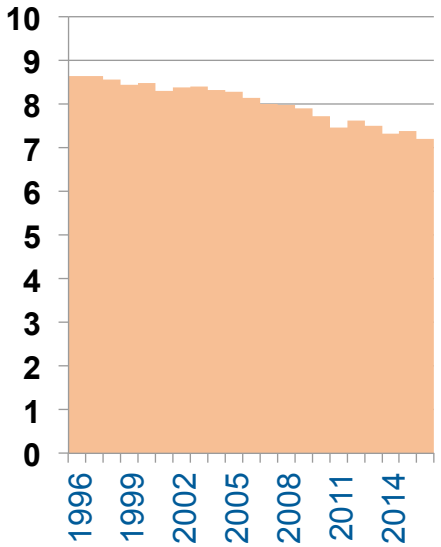


CAGR + 5-10%

e.g.: Idaho, Rajasthan, AndraPradesh, Bihar

Step backs

Japan

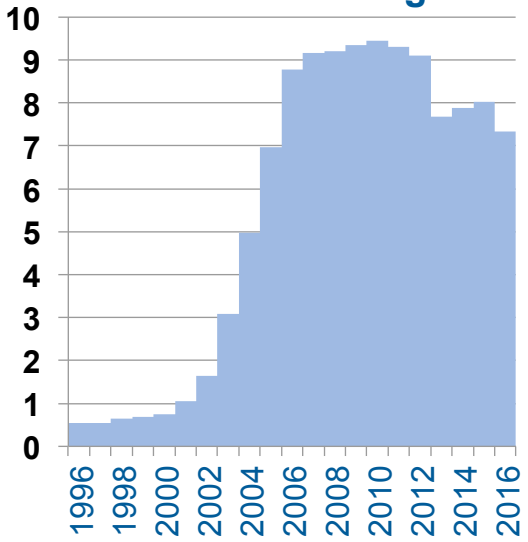


Steady decline

e.g.: Japan, Korea, weak regions in EU

Mountains

China - Inner Mongolia

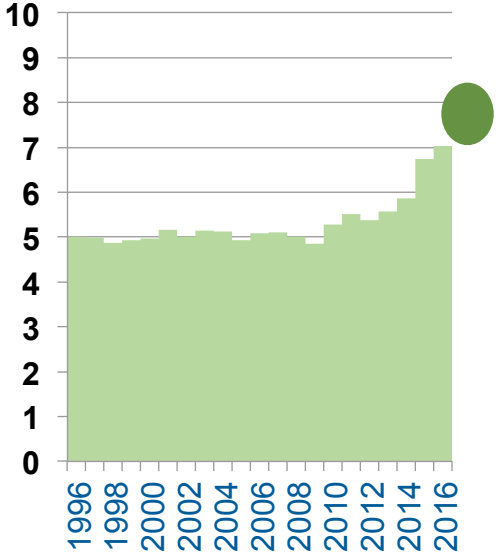


Rise and decline

e.g.: China, Australia?, California?

Wake-ups

Ireland



Sudden change

e.g.: EU regions after quota

2020 IFCN Research Conference planned in Russia

1. **The Research Topic:** How to stay or become a competitive dairy region.

2. **Moscow/ Pereslavl** 7- 10 June 2020 with Russia Dairy News

3. **Participants:** Dairy economists from > 40 countries

4. **Sponsor opportunities:**
   Once you are excitited about this idea and what to be part of the event please contact us

IFCN Dairy Research Conference 2018 Ireland

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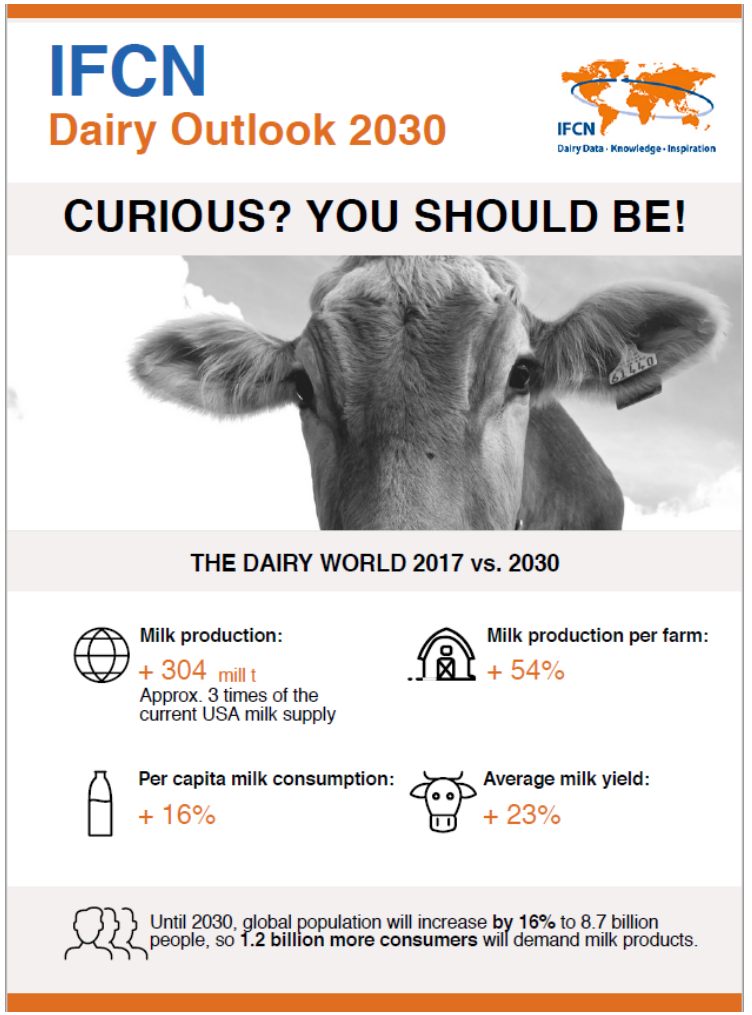


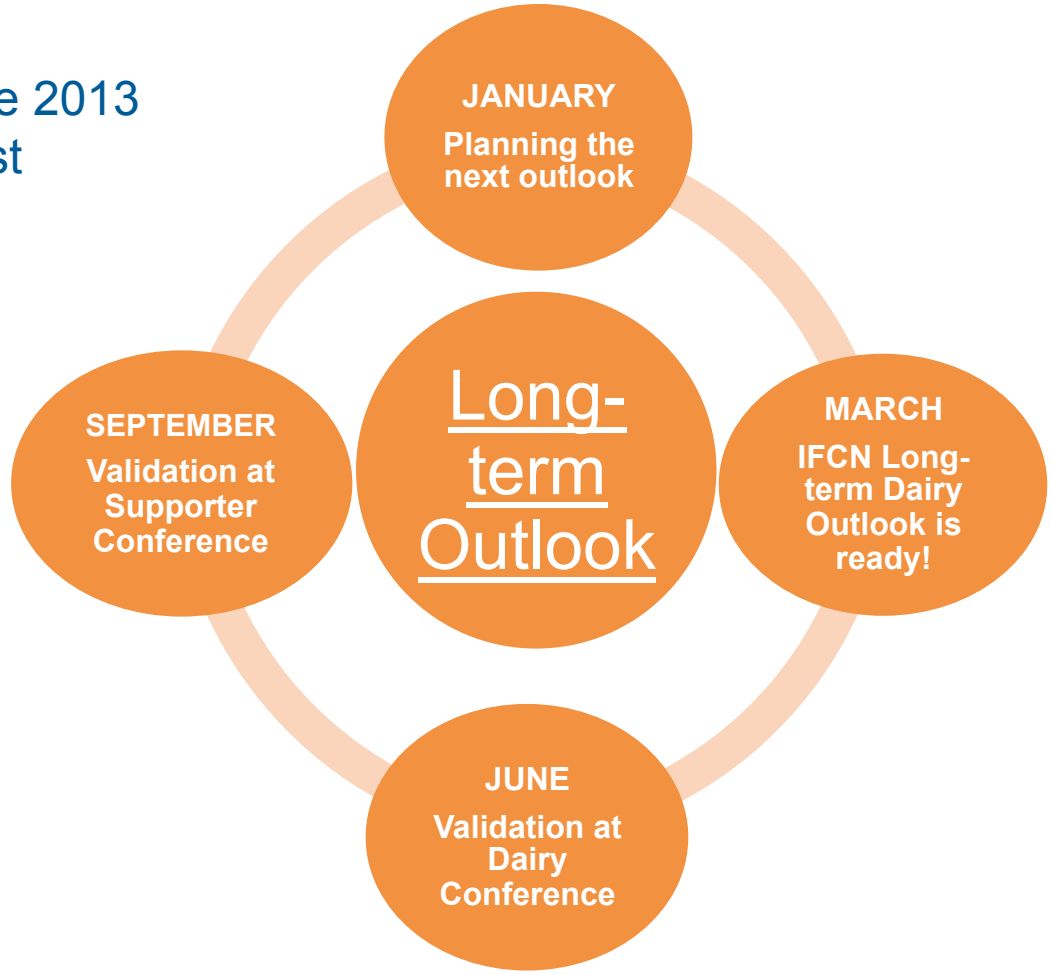
IFCN Long-term Dairy Outlook - concept

What is the IFCN Long-term Dairy Outlook:

It has been an ongoing research project in IFCN since 2013
It is a database ex post 1996–2017 & 13 year forecast
It covers 200 countries and has comparable data

Method – Iterative supply &demand simulation:

1. Define a scenario + technical assumptions
2. Simulate milk supply and demand per country
3. Search for the balancing world milk price level



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IFCN Long-term Dairy Outlook Scenarios

Demand: Strong milk preferences and substitution of vegetal fat & protein

+

Income Restricted

2.3% Growth

-

+

Policy

- GDP decline
- Protectionism
- Political instability
- Technological Progress

Stagnation

Rich & Picky

Policy

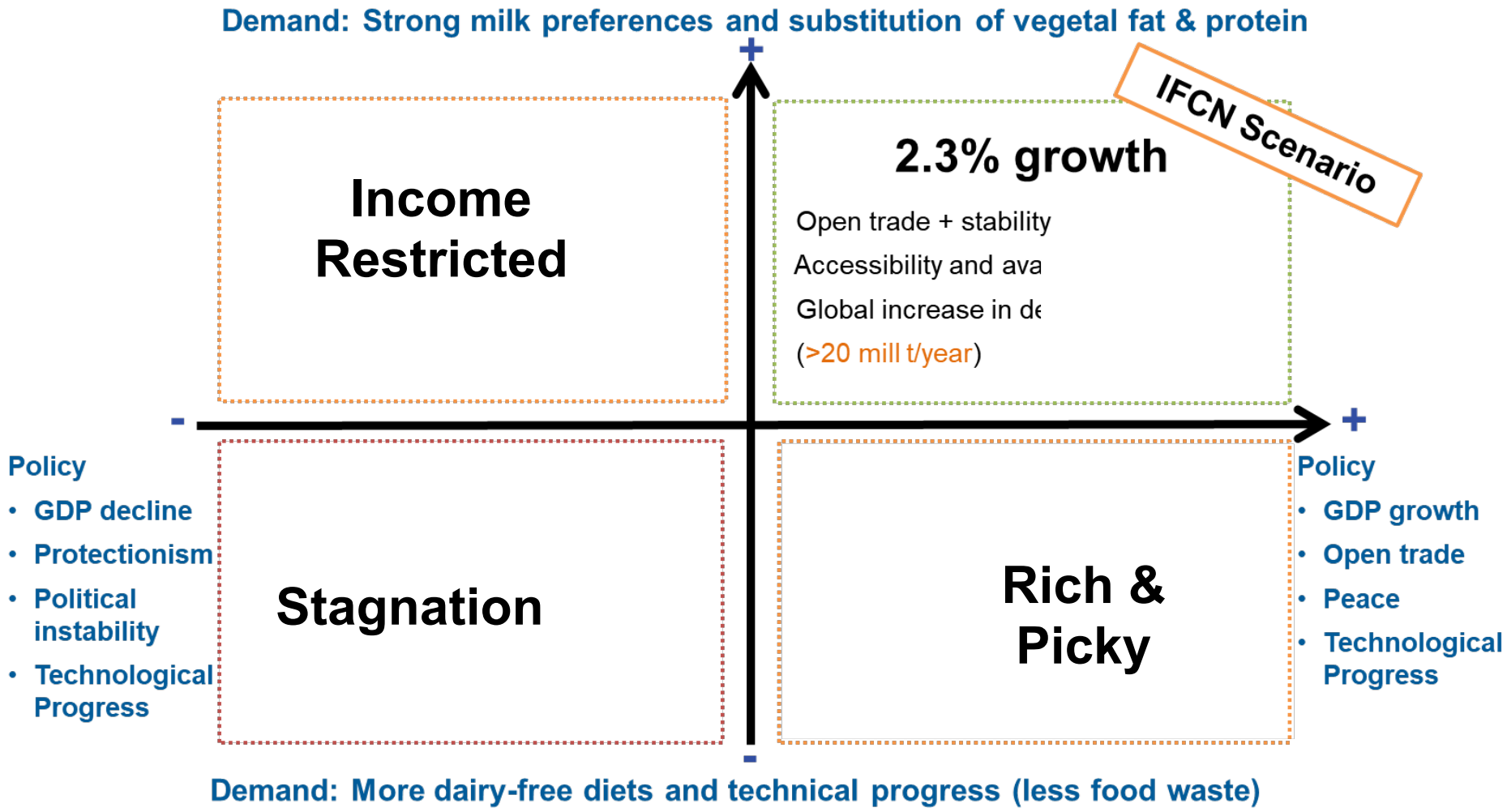
- GDP growth
- Open trade
- Peace
- Technological Progress

-

Demand: More dairy-free diets and technical progress (less food waste)

Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

IFCN Long-term Dairy Outlook Scenarios



Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

Dairy World in 2007 / 2017 / 2030

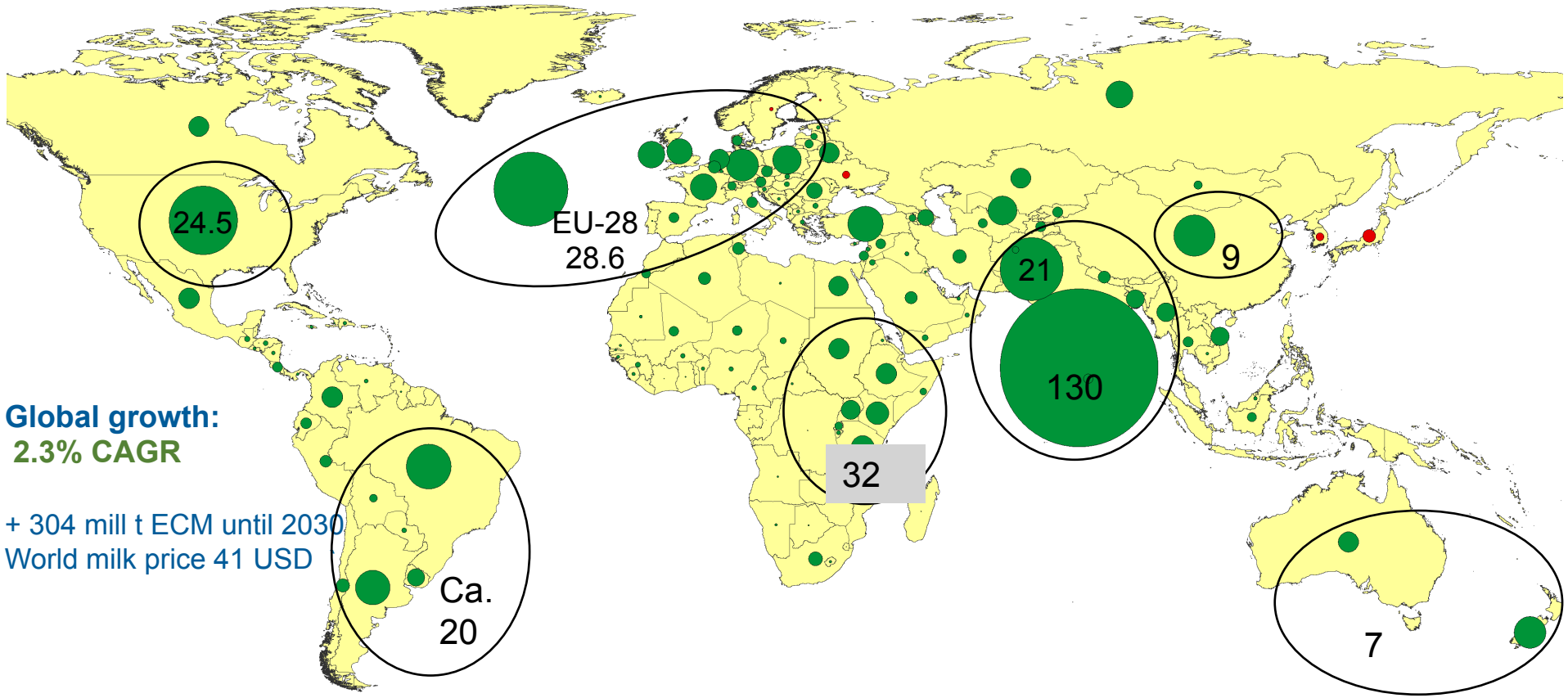
World	Unit	Annual values			Change 2030 vs 2017		
		2007	2017*	2030	Absolute	%	CAGR %/year
Milk supply and demand							
Milk production ≈ milk demand**	mill t ECM	696	864	1168	304	35%	2.3%
World trade							
Excl. EU-28 intra trade***	mill t ECM	36	55	95	40	73%	4.3%
Supply drivers							
Number of milk animals	mill head	332	372	417	45	12%	0.9%
Average milk yield	t / milk animal / year	2.0	2.2	2.7	0.5	23%	1.6%
Farm number	mill	119	118	104	-14.0	-12%	-1.0%
Average farm size	head / farm	2.8	3.1	4.0	0.9	29%	2.0%
Demand drivers							
Population	billion	6.6	7.5	8.7	1.2	16%	1.1%
Dairy consumption per capita	kg ME/ capita/ year	104	116	135	19	16%	1.2%

Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

Where and how will the milk of the future be produced?

Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

World milk production growth until 2030



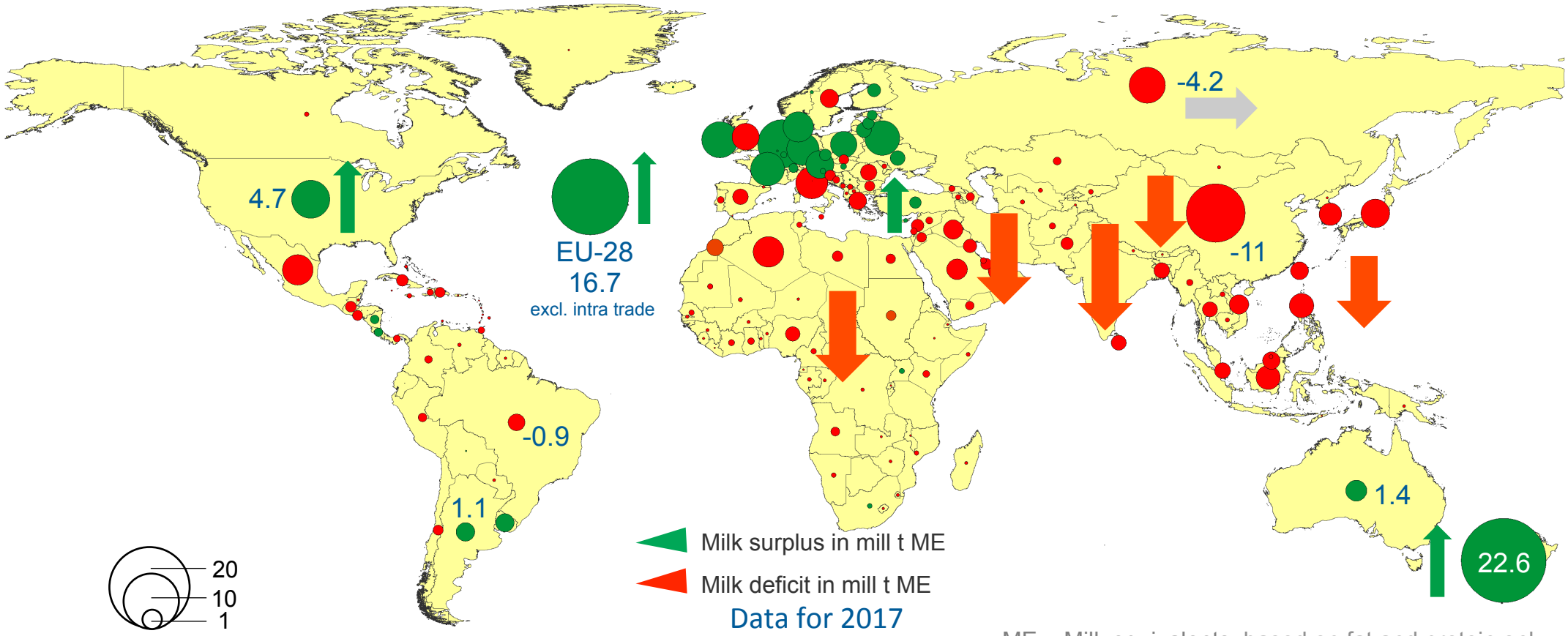
Global growth:
2.3% CAGR

+ 304 mill t ECM until 2030
World milk price 41 USD

Milk production growth 2030 vs 2017 (all milk) in mill t ECM

Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

Milk surplus and deficit per country 2017 + forecast 2030

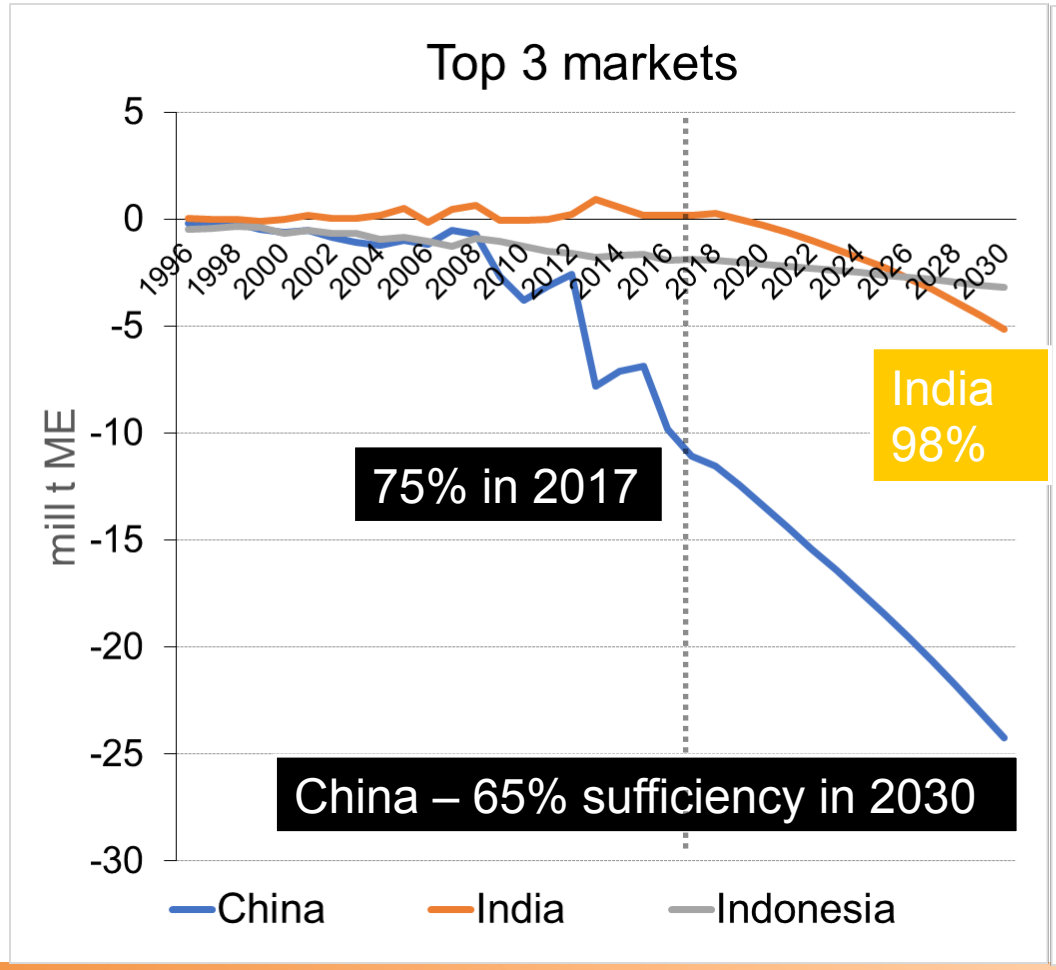


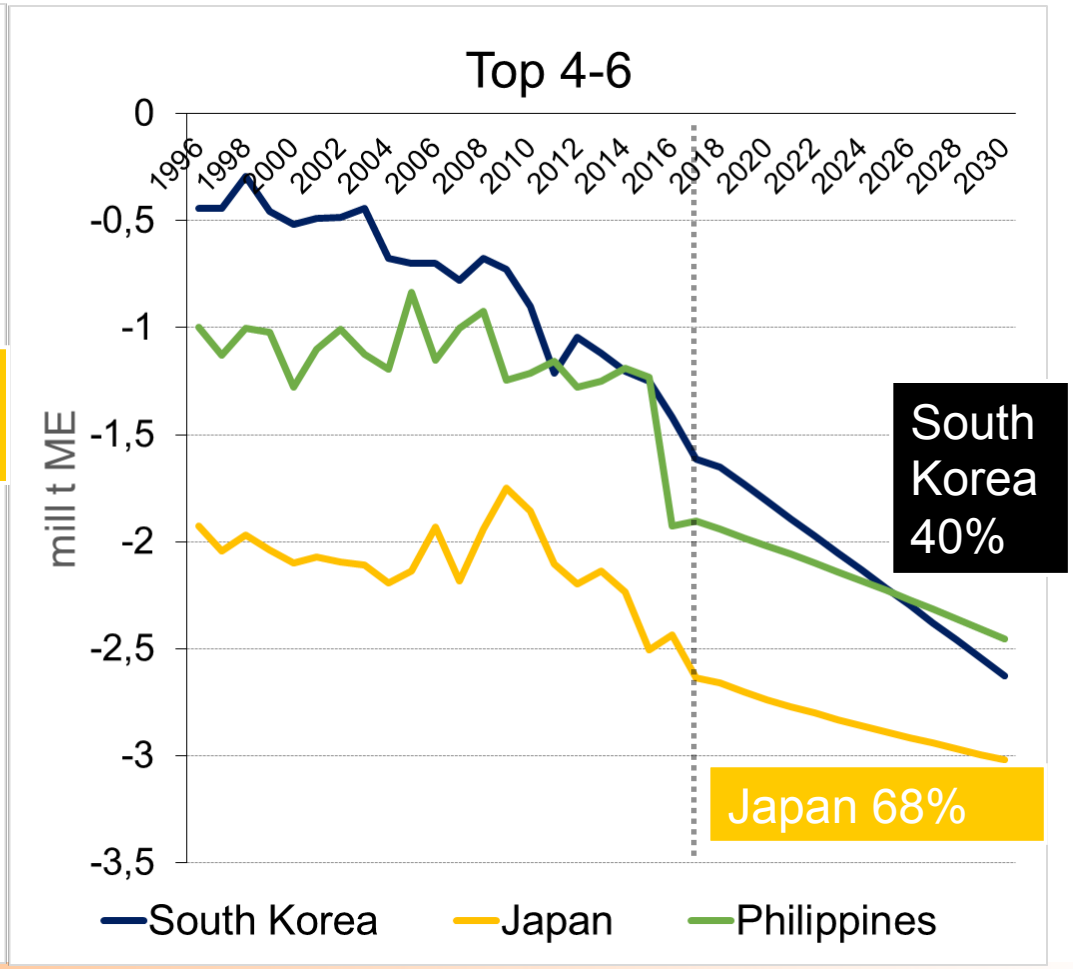
ME = Milk equivalents, based on fat and protein only

New Zealand and the EU-28 provide ~70% exports
New net exporters: India, Iran, Turkey, Uganda, South Africa, Costa Rica, Nicaragua

Source: D3.2 - Dairy Sector Analysis with IFCN Long-term Dairy Outlook 2030, status 3/2018

Surplus & deficit: Top 6 Asian countries





Summary

1. Last 20 year: Milk demand and supply grew + 60% = + 324 mill t milk

2. 2030: Consumer trust in dairy and “policy” are key uncertainties.

3. 2030: IFCN predicts growth 2,3% per year = + 304 mill t milk more;

4. What can we do better
   a) Tell the great dairy story more and better

   b) Creativity + thinking out of the box is needed to win the future

   c) Start benchmarking ideas + identify the top shots

Acknowledgement

The cooperation of these people and companies made this presentation possible

Network of IFCN Researchers

Network of IFCN Supporters

People in the IFCN Center